

AMENDMENT TO THE CLAIMS:

1. (Currently Amended) A re-usable carrier structure for carrying an article, comprising
a carrier base having at least a portion thereof transparent to electromagnetic radiation,
a surface of said carrier base ~~having~~ adapted to have a different surface properties
property from a surface of the article, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C; and
a removable tacky adhesive layer disposed on said carrier base,
said removable tacky adhesive layer being cross-linkable ~~[[by]]~~ when exposed to
electromagnetic radiation, ~~[[by]]~~ heat, or ~~[[by]]~~ both heat and electromagnetic radiation
through said carrier base, to decrease the adhesion thereof, and peel strength of said
removable tacky adhesive layer, and
said removable tacky adhesive layer after being cross-linked having a different
release profile and peel strength from the surface of the article than from the adapted
surface of said carrier base, wherein the article is removable leaving said removable
tacky adhesive layer adhering to said carrier base, and wherein said removable tacky
adhesive layer is removable from said carrier base and without leaving a substantial
residue so that said carrier base is available to be reused with another removable
adhesive layer.
2. (Previously Presented) The re-usable carrier structure of claim 1, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
3. (Currently Amended) The re-usable carrier structure of claim 1, wherein the electromagnetic radiation is applied to said removable tacky adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.

4. (Currently Amended) (AM4) The re-usable carrier structure of claim 1, wherein the removable tacky adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.
5. (Currently Amended) The re-usable carrier structure of claim 1, wherein the removable tacky adhesive layer loses the majority of its peel strength after cross-linking.
6. (Currently Amended) The re-usable carrier structure of claim 1, wherein the removable tacky adhesive layer loses about 70% of its peel strength after cross-linking.
7. (Original) The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
8. (Original) The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
9. (Original) The re-usable carrier structure of claim 1,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
10. (Currently Amended) A re-usable carrier structure comprising:
a carrier base, said carrier base having at least a portion thereof transparent to electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C; and
an adhesive laminate disposed on a surface of said carrier base, said adhesive laminate comprising:
an adhesive base;
a removable first adhesive layer disposed on a first surface of said adhesive base

for removably connecting said carrier base and said adhesive base; and

a removable second adhesive layer disposed on a second surface of said adhesive base for providing a tacky carrier surface,

said removable second adhesive layer being cross-linkable [[by]] when exposed to electromagnetic radiation, [[by]] heat, or [[by]] both heat and electromagnetic radiation through said carrier base, to decrease the tackiness ~~thereof~~, and peel strength of said removable second adhesive layer.

wherein an article carried on the carrier surface is released said removable second adhesive layer is ~~cross-linked by~~ exposed to electromagnetic radiation applied through the transparent portion of the carrier base, [[by]] heat, or [[by]] both heat and electromagnetic radiation applied through the transparent portion of the carrier base, leaving said adhesive laminate on said carrier base, and wherein said adhesive laminate is removable from said carrier base [[and]] without leaving a substantial residue so that said carrier base is available to be reused with another adhesive laminate.

11. (Previously Presented) The re-usable carrier structure of claim 10, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
12. (Currently Amended) The re-usable carrier structure of claim 10, wherein the electromagnetic radiation is applied to said removable second adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
13. (Currently Amended) The re-usable carrier structure of claim 10, wherein the removable second adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.
14. (Currently Amended) The re-usable carrier structure of claim 1, wherein the removable second adhesive layer loses the majority of its peel strength after cross-linking.

15. (Currently Amended) The re-usable carrier structure of claim 10, wherein the removable second adhesive layer loses about 70% of its peel strength after cross-linking.
16. (Original) The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
17. (Original) The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
18. (Currently Amended) The re-usable carrier structure of claim 10, further comprising an adhesive base disposed between said removable first and said second adhesive layers, said adhesive base being stable to degradation at temperatures less than or equal to about 80°C.
19. (Original) The re-usable carrier structure of claim 10,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
20. (Currently Amended) A re-usable carrier structure comprising
a carrier base having at least a portion thereof transparent to electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C;
a removable first adhesive layer removably disposed on a surface of said carrier base; and
a removable second adhesive layer disposed on said first adhesive layer for providing a tacky carrier surface, and
said removable second adhesive layer being cross-linkable [[by]] when exposed to electromagnetic radiation applied through the carrier base, [[by]] heat, or [[by]] both

heat and electromagnetic radiation applied through the carrier base, to decrease the tackiness ~~thereof~~, and peel strength of said removable second adhesive layer.

wherein an article carried on the carrier surface is released when said removable second adhesive layer is cross-linked by exposure to electromagnetic radiation applied through the transparent portion of the carrier base, ~~[[by]]~~ heat, or ~~[[by]]~~ both heat and electromagnetic radiation applied through the transparent portion of the carrier base, leaving the removable first and second adhesive layers on said carrier base, and

wherein said removable first and second adhesive layers ~~[[is]]~~ are removable from said carrier base ~~and~~ without leaving a substantial residue so that said carrier base is available to be reused with another adhesive layer.

21. (Previously Presented) The re-usable carrier structure of claim 20, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
22. (Currently Amended) The re-usable carrier structure of claim 20, wherein the electromagnetic radiation is applied to said removable second adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
23. (Currently Amended) The re-usable carrier structure of claim 20, wherein the removable second adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.
24. (Currently Amended) The re-usable carrier structure of claim 20, wherein the removable second adhesive layer loses the majority of its peel strength after cross-linking.
25. (Currently Amended) The re-usable carrier structure of claim 20, wherein the removable second adhesive layer loses about 70% of its peel strength after cross-linking.

26. (Original) The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
27. (Original) The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
28. (Original) The re-usable carrier structure of claim 20, further comprising an adhesive liner disposed between said first and said second adhesive layers, said adhesive liner being stable to thermal degradation at temperatures less than or equal to about 80°C.
29. (Original) The re-usable carrier structure of claim 20 further comprising:
a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
- 30-34. (Cancelled)
35. (Currently Amended) A re-usable carrier structure for releasably carrying one or more objects, said re-usable carrier comprising:
a carrier structure having a support member and adapted for receiving a cover;
a carrier base disposed on the support member of said carrier structure, wherein at least a portion of said carrier base is transparent to ultraviolet radiation, and wherein said carrier base is formed of a material that is stable at temperatures less than about 80°C; and
a removable cross-linkable tacky adhesive layer disposed on said carrier base for adhesively holding one or more objects, wherein said removable cross-linkable tacky adhesive layer becomes cross-linked upon exposure to ultraviolet radiation applied through the transparent portion of said carrier base layer thereby to exhibit a reduction of adhesiveness and peel strength, ~~wherein the reduction of adhesiveness to the one or more objects is more than about 70% and exceeds the reduction of adhesiveness to said carrier~~

~~base~~, and

a cover disposed on said carrier structure, wherein said cover is of a material opaque to ultraviolet radiation for blocking ultraviolet radiation from cross-linking said removable cross-linkable tacky adhesive layer,

wherein one or more objects adapted to be carried on said removable cross-linkable tacky adhesive layer are released when said cover is removed and said removable cross-linkable tacky adhesive layer is cross-linked by exposure to ultraviolet radiation applied through the transparent portion of the carrier base, and said removable cross-linkable tacky adhesive layer is removable from said carrier base and without leaving a substantial residue so that said carrier base is available to be reused with another adhesive layer.

36. (Previously Presented) A re-usable carrier for releasably carrying one or more objects, said re-usable carrier comprising:

a carrier structure having a support member and adapted for receiving a cover;

a carrier base disposed on the support member of said carrier structure, wherein at least a portion of said carrier base is transparent to ultraviolet radiation, and wherein said carrier base is formed of a material that is stable at temperatures less than about 80°C; and

a cross-linkable tacky adhesive layer disposed on said carrier base for adhesively holding one or more objects, wherein said adhesive layer becomes cross-linked upon exposure to ultraviolet radiation applied through the transparent portion of said carrier base layer thereby to exhibit a reduction of adhesiveness, wherein the reduction of adhesiveness to the one or more objects is more than about 70% and exceeds the reduction of adhesiveness to said carrier base, and

a cover disposed on said carrier structure, wherein said cover is of a material opaque to ultraviolet radiation for blocking ultraviolet radiation from cross-linking said cross-linkable tacky adhesive layer,

wherein said carrier structure includes a rectangular frame having a ledge

providing the support member, and wherein said cover includes first and second covers disposed on opposite ends of said rectangular frame, wherein said first and second covers and said rectangular frame enclose said carrier base,

whereby one or more objects carried on said adhesive layer are released when said cover is removed and said adhesive layer is cross-linked by exposure to ultraviolet radiation applied through the transparent portion of the carrier base.